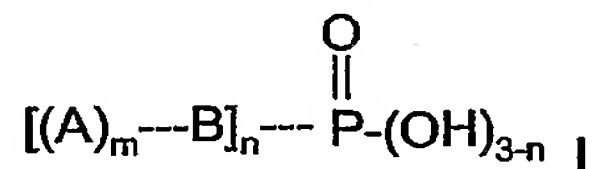


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Claims

1. A phosphoric acid ester and salts thereof of the general formula I,



wherein

- 5 **A** is a monohydroxyl residue derived from

C₁-C₂₀-alkyl-(AO)_x-OH or Acyl-(AO)_x-OH; or

C₁-C₂₀-alkyl -(AO)_x-(HA)_y-OH or Acyl-(AO)_x-(HA)_y-OH; or

C₁-C₂₀-alkyl -(AO)_x-(AA-AO)_y-OH or Acyl-(AO)_x-(AA-AO)_y-OH; or

MO -(HA)_y-OH or MO-(AA-AO)_y-OH; wherein

- 10 **Acyl** is an aromatic carboxylic acid residue or a saturated or unsaturated fatty acid residue;

AO is a polyC₂-C₄alkyleneglycol residue,

HA is a hydroxycarboxylic acid or a lactone thereof,

AA is a dicarboxylic acid,

- 15 **MO** is a monoalcohol,

x is 1 to 250,

y is 1 to 250,

- B** is a mono-, di-, tri- or polyhydroxy di-, tri- or multi-carboxylic acid residue which is linked via the hydroxy group to the phosphoric acid and via one of the carboxylic acid groups to the monohydroxyl residue [A], the remaining carboxylic acid group(s) is/are free or is/are esterified with a further monohydroxyl residue [A], resulting in branched esters;

n is 1-2;

m is 1-4.

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2. A phosphoric acid ester according to claim 1, wherein B has at least one free carboxylic acid group and no branching center.

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3. A phosphoric acid ester according to claim 1, wherein the free carboxylic acid group(s) of B is/are fully esterified.

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4. A phosphoric acid ester according to claim 1, wherein B has at least one free carboxylic acid group and at least one free carboxylic acid group is esterified.
5. A phosphoric acid ester according to any one of claims 1 to 4, wherein B is malic acid or citric acid.
6. A phosphoric acid ester according to any one of claims 1 to 5 wherein
- 10 Acyl is a saturated or unsaturated fatty acid residue;
AO is a polyC₂-C₃alkyleneglycol residue;
HA is ε-caprolactone or δ-valerolactone;
AA is a dicarboxylic acid;
MO is a monoalcohol having 4 to 30 carbon atoms is the alkyl chain,
- 15 x is 2 to 50,
y is 2 to 50.
7. A mixture of a phosphoric acid ester according to any one of claims 1 to 6 with a
- 20 phosphoric acid ester of polyC₂-C₄alkylene glycolmonoethers in wt ratio of 0.01 to 99.99; preferably 10 to 90, more preferably 50 to 50.
8. The use of a phosphoric acid ester of the formula I or salts thereof according to any one of claims 1 to 6 or of a mixture according to claim 7 as dispersant.
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9. The use of a phosphoric acid ester of the formula I or salts thereof in the production of sheet moulding compounds (SMC) or bulk moulding compounds (BMC).
10. The use of a phosphoric acid ester of the formula I or salts thereof in the production
- 30 of water- and solvent-based coatings and printing inks.